



American International Chemical, Inc.

Corporate Offices: (800) 238-0001

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SPECIFICATION SHEET

RETINOL 50 WM

Code No.	SCN No.	CAS No.	Effective Date	Product Manager	Rev. No.	Approved By
R50PIL	2665	See below	August 12, 2011	LR	No. 3	MPR

INCI NAME/CAS #:	Polysorbate-20 Retinol BHA BHT	CAS #9005-64-5 CAS #68-26-8 CAS #25013-16-5 CAS #97123-41-6
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CHARACTERISTICS:	Pale yellow to yellow oily viscous liquid contains 50% retinol in Polysorbate 20 and stabilized with 1.5% BHT and 0.5% BHA.
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	Solubility	Dispersible in water
	Identification	
	Color development	Develops maximum blue color with antimony trichloride solution in chloroform
	Vitamin A (TLC)	Rf values of blue-green spot matches with reference spot
	UV absorption in IPA (wavelength)	324.0-327.0 nm max
	BHT/BHA (TLC)	Meets requirements
	Assay	45.0-55.0 %
	Residual solvents	Meets USP, EP requirements
	Microbial purity (total bacterial count)	100 cfu/g max

PACKAGING:	1 kg aluminum bottle or 5 kg aluminum bottle
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APPLICATIONS:	Anti aging, wrinkle, and sun protection creams.
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SHELF LIFE AND STORAGE INSTRUCTIONS:	Retinol 50 WM is stable for at least 12 months, if stored in original sealed containers at temperatures below 8°C away from light. Once the can has been opened, the remaining contents should be kept under an inert gas and used up quickly.
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TECHNICAL PROPERTIES AND HANDLING:	<p>Retinol is crystalline solid that is sensitive to oxygen, heat, light and heavy metals. It is therefore dissolved in oils, filled under nitrogen, stabilized with anti-oxidants and stored in aluminum cans at low temperature.</p> <p>Retinol can crystallize out at low temperatures, but the crystals can be re-dissolved by heating the can up to 50°C.</p> <p>The time needed to re-dissolve the retinal crystals varies and is dependent on the temperature and time of storage.</p> <p>It is therefore impossible to give exact advice how long it takes to dissolve.</p> <p>It is recommended to manufacture Retinol formulations under an inert atmosphere and to add Retinol together with chelating agents at a temperature not exceeding 40°C. The finished formulation should be filled under inert atmosphere in aluminum collapsible tubes which should be then stored below 20°C during transport and storage.</p>
OTHER:	Plant is HACCP, ISO 9001/14001, cGMP, Kosher (KOF-K) Halal certified.
OTHER: (Continued)	<p>The skin becomes elastic, fresh and adequately supplied with moisture. It looks clearer and has a healthy color.</p> <p>Recommended concentration of Retinol in cosmetic preparations:</p> <p>Face Cream: 0.01- 0.05 % (assumed two application per day) Night Cream: 0.05 –0.1 % (assumed one application per day) Hand Cream: 0.01- 0.05 % (assumed two applications per day) Body lotion: 0.005- 0.01% (assumed one application per day) After Sun Face Cream: 0.01 –0.05% (assumed one application per day) After Sun Body Lotion: 0.005-0.01%(assumed one application per day)</p>